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### YIELDS OF PORK

**Dressing and Cutting Yields** 

									Pounds
Hog, live weight.									225
Whole carcass							•		176

#### Trimmed cuts:

	Pct. of live wt.	Pct. of carcass wt.	Pounds
Fresh hams, shoul-		~	
ders, bacon, jowls	40	50	90
Loins, ribs, sausage	15	20	34
Total	55	70	124
Lard, rendered	12	15	27

#### Curing Yields Obtained With-

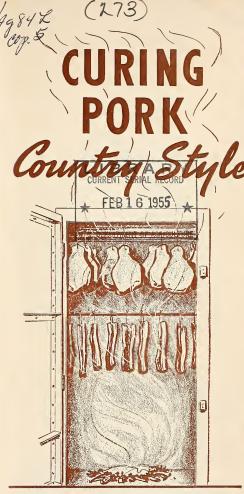
	Dry cure Percent	Brine cure Percent
Weight of meat, fresh	100	100
Weight, cured	95	103
Weight, cured and		
smoked	90	96
Weight, stored 12		
months	70–75	70-75

#### References

Pork on the Farm—Killing, Curing and Canning.—U. S. Dept. Agr. F. B. 1186.

Curing Pork Country Style.—Motion Picture— 2 reels—16 mm., black and white and color. Motion Picture Service.—U. S. Dept. Agr., Washington 25, D. C.

Your own State agricultural college bulletins.



U. S. DEPARTMENT OF AGRICULTURE

Leaflet No. 273

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### **Curing is a Race**

Curing is a race between the growth of spoilage germs in fresh pork and the penetration of the preserving salt. To give salt time to penetrate the meat, bones, and joints, chill fresh pork promptly and keep it cold (36° to 40° F.) during the curing period.

On the farm, meat often has to be cured at temperatures above 40° F. Under these conditions families speed up salt penetration by:

- (1) Salting lightly and spreading the fresh, warm cuts. (Never pile warm meat or blanket it with salt.)
  - (2) Poking salt into the joints.
- (3) Pumping ice-chilled sweet-pickle solution into the meat.
- (4) Boning or slicing the cuts into smaller, more quickly salted pieces.

All these methods help and may save the meat, but none are so satisfactory as curing at the proper temperature— 36° to 40° F.

If curing temperatures drop below freezing for several days, add same number of days to curing time. Temperatures below 36° F. slow up salt penetration.

Frozen meat is difficult to handle. If fresh meat freezes, thaw it in chill room or in cold brine before putting it in cure.

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### **Choosing Curing Recipes**

If you have a satisfactory curing recipe—use it. Personal tastes and conditions vary. The job is to produce sound meat that your family enjoys.

#### Remember:

Salt preserves the meat.

Sugar improves the flavor.

Saltpeter (in the small amounts commonly used) merely sets the red color in the lean.

You can cure meat with Salt alone, or with Salt and sugar, or with Salt and saltpeter.

Most persons prefer the combination: Salt, sugar, and saltpeter—the popular "sugar cure." See curing recipe on inside pages.

The faster dry cure is popular and safer in the South.

The sweet-pickle cure is used more often in the North, where protection from subfreezing temperatures is important.

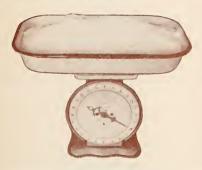
With either the dry or sweet-pickle cure the main essentials are to—

- 1. Chill the meat and keep it cold.
- 2. Use the proper amount of salt.
- 3. Give the meat enough curing time to absorb the salt thoroughly.
- Smoke cured meat long enough to drive out excess moisture.

### Preventing Oversalty Meat

The line between just salty enough to keep and too salty to taste good is narrow. Care is needed to make both a sound and a palatable product.

Eight pounds of salt to dry-cure 100 pounds of trimmed pork is recommended in this folder. Eight pounds in dry cure is on the salty side. If you use the dry cure and are careful to get all the mixture packed into the shanks and patted on the faces of the hams and shoulders, 6 pounds is enough and will make a more palatable ham or shoulder.



Give the salt plenty of time to penetrate to the center of the cuts and distribute itself evenly through the piece (2 or even 3 days to the pound, per piece, dry cure).

All the surface salt may be absorbed into the dry-cured meat before curing time is up. Give it more time to work down into the center of the cuts.

LESS SALT AND A LITTLE MORE CURING TIME IS A GOOD RULE

### To Obtain Sound, Palatable Hams and Bacon

Pork Must Be Chilled, Cured, and Stored Carefully. Follow these rules:



### Chill fresh carcasses promptly.

Split warm carcasses. Pull out blanket of leaf fat. Hang sides so they do not touch. Chill at temperatures below 40° F., but protect from freezing.



# Weigh meat and curing ingredients carefully.

Too little salt may cause spoilage; too much salt makes hard, dry, oversalty meat.



# 38 F. 3 Keep meat cold while in cure.

Hold curing meat at a temperature near 36° to 40° F. Higher temperatures increase the chance of spoilage. Lower ones slow down salt penetration.

## 4 Figure curing time carefully.

Too few days in cure may cause spoilage. Too long a cure in heavy salt results in loss of quality.



# CURING DIRECTIONS

The Dry Curing Method



1 Check internal temperature of heaviest h Be sure it is helow 40° F.



Rub one portion of curing mixture on all surfaces of meat, poking some into shank ends. Pat about a 1/8-inch layer on lean face of hams. Pat a thin covering on shoulder. Only "frost" the thin bacon strip with the mixture. The heavier the cut the greater its share of the mixture.



Weigh the trimmed meat and the right amount of curing material. For 100 pounds of ham or shoulder—

Salt-8 pounds

Sugar—2 pounds (brown, white, or sirup) Saltpeter-2 ounces

For bacon and other thin cuts, use only one-half this amount.



b Fit salted meat in clean barrel or crock, being careful not to shake off the curing mixture. Hold in cold place, at 36° to 40° F. if possible.



3 Mix curing ingredients thoroughly, being especially careful to mix the finely powdered saltpeter through the salt.



7 Figure time in cure: Bacon, 1½ days to the pound; or for a 10-pound strip, 15 days. Hams and shoulders, minimum, 25 days; or 2 days to the pound. A 10-pound ham or shoulder, 25 days. A 15-pound ham or shoulder, 30 days. Check curing time on calendar. calendar.



Divide the curing mixture into two about equal portions, one portion to use at once, the other to save for resulting. For bacon and other thin cuts, use only one portion.



Resalt with other half of curing mixture 6 to 8 days after meat is put in cure. Hams and shoulders, salt as before. Bacon and other thin cuts, add no more curing mixture. Keep pack cold—at 36° to 40° F.



# The Sweet-Pickle Curing Method

Country-cured pork can be made in a sweet-pickle pack as well as with the faster dry cure. Fit the cold, smoothly trimmed cuts into a

clean barrel or crock. Cover with a cold curing solution (36° to 40° F.) made by dissolving 8 pounds of salt, 2 pounds of sugar, and 2 ounces of saltpeter in 4½ gallons of water. Weight the of saltpeter in 4½ gallons of water. Weight the meat to keep it from floating above the pickle solution. Use enough solution to submerge the meat. Keep pack cold throughout curing period—at 36° to 40° F. if possible.

Overhaul the pack about the seventh day after putting it in cure by removing all the meat, pouring out the sweet-pickle, repacking the meat, and covering with the same restired.

the meat, and covering with the same restirred curing mixture. Overhaul two more times—about the fourteenth and the twenty-eighth

Curing time for hams and shoulders is 3½ to 4 days to the pound, with a minimum of 28 days for the lightweight cuts. Thus, a 6-pound shoulder, 28 days in cure; a 15-pound ham, 60

days. A 10-pound bacon, 15 days; heavier bacon and loins, 21 days.

Milder bacon may be cured by using 5½ instead of 4½ gallons of water to make the sweet-

pickle.

Some pickled pork is left in curing solution until used. It is rather salty.

If the sweet-pickle solution sours or becomes ropy or sirupy, discard it. Scrub the meat in hot water, scald the barrel, rechill it, repack the meat, and cover with new cold curing solution. Use 5½ gallons of water to make this second solution instead of the 4½ recommended above.

# **Pumping Methods**

**Artery Pumping** 



Locate femoral artery near the surface and slightly to the side of ilium bone. Open artery with tweezers or small forceps and insert needle. Use pressure of about 45 pounds per square inch. Insert needle into artery which is round and thick, and not into vein which is flat and thinwalled.



Pump curing solution into ham until it has gained approximately 10 percent of its original weight. Pump part of mixture into the left branch of the artery and remainder into the right branch. Use the sweet-pickle mixture described above, but dissolve ingredients in about 3½ gallons of water.

### Milder Commercial Type Products

The cold, pumped hams and shoulders are put in dry cure or sweet-pickle for 5 to 15 days, then heated and smoked for 24 hours in a smokehouse temperature of 135° to about

These commercial hams and shoulders are mild and moist and are often made more tender by this heating. They are almost as perishable as fresh pork and should be STORED UNDER REFRIGERATION until

### Saltier Country Style Cure

Hams cured country style are given at least 2 days per pound in dry cure or 3 days per pound in sweet-pickle cure after pumping. They are smoked usually 2 or more days at a temperature of 90° to 120° F. and can be STORED SAFELY IN SMOKEHOUSE OR PANTRY WITHOUT REFRIGERATION.

BEFORE SELECTING THE CURING METHOD, DECIDE WHERE AND HOW YOU ARE GOING TO STORE THE MEAT

# Stitch Pumping



Insert needle at indicated locations. Use either hand or pressure pump and force the curing solution into the interior of ham or shoulder. Be sure the needle reaches points close to the joints and along the bone. Use same mixture as in artery pumping. Pack pumped hams as in sweet-pickle method and cover with regular curing pickle.

Remove pieces from the dry or brine pack when their curing time is up. The lighter cuts may be brushed to remove excess dry mixture or lifted from the brine and held in the cold until the heavier pieces are ready to

# Removing Pork From Cure for Smoking



2 Soak fully cured meat in cold fresh water to remove some surface salt (15 to 30 minutes).



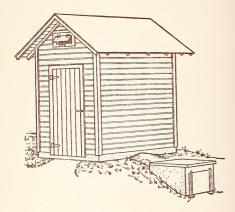
3 String meat for hanging in smoke: Hams and shoulders, through shank. Bacon, reinforce flank end with hardwood skewer or clean galvanized wire to hold it square in smoke.



4 Scrub strung meat clean with sharp brush and hot (110 to 125° F.) water so it will take brighter color in smoke.

### **SMOKING CURED PORK**

Smoking colors, flavors, and dries cured pork and slows the development of rancidity. It has a slight preservative action.



Hang the cured, soaked, scrubbed meat to drip overnight to prevent streaking or smudging in smoke. A wet surface will not take a uniform smoked color. Hang so that no pieces touch.

Build a fire of any hardwood—hickory, oak, apple, pecan—or even corn cobs. Hardwood sawdust is excellent. Never use pine. Its smoke is sooty and strong-smelling.

Heat smokehouse to 100° to 120° F., or just enough to shine the surface grease.

Open ventilators to let out moisture.

Close ventilators the second day, and smoke 1 or more days, or until meat has the desired color. A thin haze of smoke is as effective as a dense cloud.

Be careful not to overheat and scorch the meat.

If the smoke flavor is not desired, hang cured meat to dry for about a week before bagging it.

# STORING SMOKED PORK

Protect meat from insects with a strong muslin or paper bag.

- 1. Cool smoked meat to air temperatures.
- 2. Wrap in grease-resistant paper to prevent grease softening the protecting outer bag.
- Bag and hang in dark, dry, ventilated, rat-free place.

#### Refrigerated Storage

Insects such as skipper flies will not multiply at temperatures below 45° F. Surface mold will grow at temperatures above 15° to 18° F.

Mild bacon is often kept in freezer storage, but to save locker space the hams and shoulders are often held at home, unrefrigerated. Cured pork, especially bacon, will develop some rancidity even in the freezer.

### Mold growth

Surface mold will not affect the wholesomeness of the meat, even if it adds a moldy flavor. Most mold and mold flavor can be scrubbed or trimmed off. Oiling smoked meat with edible oil, such as cottonseed oil or lard, will delay mold growth. Re-oiling may be needed in a month or so.

### Aged or Smithfield-Style Pork

The characteristic pungent flavor of aged or Smithfield-style hams and shoulders is caused, in part, by the enzymes or ferments normally in the meat. Eight to 12 months' storage at air temperatures or 50 to 70 days in heated storage (105° to 110° F.) is needed to develop this flavor fully. Cured pork ripens slowly, if at all, in refrigeration. Bacon often becomes rancid during hot weather and is normally used in spring and early summer.

### If Skipper Flies Attack Meat

Trim off and burn the infested parts. Use the sound portions. Skipper worms may burrow deeply along the bone and shank. Prevent further growth by refrigerated storage.